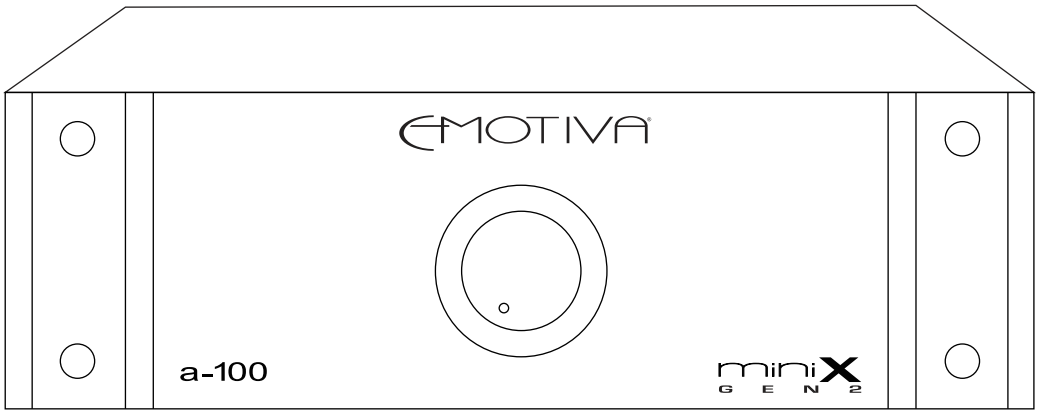
miniX GEN2

EMOTIVA®



miniX GEN2

Stereo Flex Amplifier
User Manual

Important Safety Precautions and Explanation of Symbols

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important installation, operation, and service instructions in this manual.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltages within the enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to the user.

Please read this User Manual thoroughly before attempting to install, configure, or operate the Mini-X A-100. After successful installation and configuration of the A-100, be sure to retain this manual in a safe place for future reference.

Safety is a key component to a long lasting and trouble free installation. Please read and follow all instructions and heed all warnings on the A-100 and in this manual. The vast majority of the subsequent safety precautions are common sense. If you are not comfortable with the installation of audio/video entertainment equipment, you should seek the services of a qualified installation professional or call us for help.

WARNING: To prevent the risk of fire or electric shock, do not use the Mini-X A-100 near water or in wet locations and do not expose it to rain or moisture. Doing so may result in damage to the A-100 and the risk of electric shock, which may result in bodily injury or death.

WARNING: To reduce the risk of electric shock, do not remove the cover from the Mini-X A-100. There are no user-serviceable parts inside the A-100. Refer all service to qualified service personnel.

To reduce the risk of electrical damage, verify that no short circuits are present between terminals and/or speaker wires before applying power.

Do not install the A-100 near any heat sources such as radiators or heating vents. Avoid installing the A-100 directly above other heat-producing equipment unless sufficient ventilation or forced-air cooling is provided.

Do not install the A-100 in locations without proper ventilation. The A-100 should not be operated on a bed, sofa, rug, or similar surface that may block vents. The A-100 should not be installed in an enclosed location such as a bookcase, cabinet, or closed equipment rack unless sufficient forced-air ventilation is provided.

Connect the A-100 only to power sources of the correct voltage (as shown in this manual and on the A-100). Ensure that the Input Voltage selector switch on the rear of the A-100 is set to the appropriate voltage.

Protect power supply cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and A-100 unit.

Only connect the A-100 to an electrical outlet or extension cord of appropriate type and rating. DO NOT defeat the safety purpose of a grounding or three-pronged plug by removing ground pins or using unsafe adapters. If you replace the A-100 power cord, only use one of similar type and equal or greater current rating.

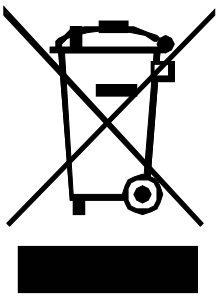
The power cable for the A-100 should be unplugged from the outlet during severe electrical storms, or when unused for a long period of time.

The A-100 should only be cleaned as directed in the User Manual. Avoid spraying liquids directly onto the A-100 and NEVER spray liquids into the vents. Care should be taken so that small objects do not fall into the inside of the A-100.

You should seek service for your A-100 by qualified service personnel if any of the following occur:

1. The power-supply cord or the plug has been damaged
2. Objects or liquid have fallen or spilled into the vents
3. The A-100 has been exposed to rain
4. The A-100 exhibits a marked change in performance
5. The A-100 has been dropped or its enclosure or chassis is damaged.

CAUTION
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



EMOTIVA®

Mini-X A-100 Stereo Amplifier

Contents

Important Safety Precautions and Explanation of Symbols
Introduction 3
About This Manual 4
Features 5
Unpacking 6
The A-100 7
Quick Start 8
Connections 9
Configuration and Operation 10
Application Suggestions / Examples 11
Care and Maintenance 12
Specifications 13
Troubleshooting 14
Emotiva Audio Corporation Limited Warranty 15
Contact Information 17
Accessories 18
Notes 19

Introduction

Thank you for purchasing the Mini-X A-100 stereo amplifier.

The A-100 offers advanced design and audiophile sound quality in a compact yet extremely flexible amplifier. The A-100 delivers 50 watts per-channel into 8 ohms and 80 watts per-channel into 4 ohms of clean, excellent sounding, dynamic power. It can be controlled manually or configured to respond to a trigger input or the presence of an audio signal, and provides both a loop audio output and a trigger output for chaining to other devices. The A-100 also includes a front panel volume control and is housed in a handsome black enclosure with aluminum highlights and blue LED illumination.

The A-100 is capable of driving speakers of average efficiency to satisfying listening levels and is perfect as a zone amplifier or as the main amplifier in a small high quality stereo system. It also includes our intelligent protection circuitry, which protects the unit and your speakers from most common fault conditions. The A-100 is a great choice wherever two channels of great sounding, reliable, audio power is needed.

Happy listening!

The Emotiva Team

About This Manual

This manual will provide you with all the information you need to achieve great performance, accurate sound, and many years of reliable service from your A-100 amplifier.

We suggest that you read through the entire manual; we kept things as short and concise as possible. Even if you're an expert user, you will probably find some interesting information and useful suggestions.

If you're really in a hurry to get started, please read the Quick Start section (on page 8); we recommend you may then read the remainder of the manual at your leisure.

You may wish to record serial numbers or other purchase information on the Notes page at the back of this manual.

Features

The Mini-X A-100 is a great sounding, compact, and very flexible, stereo amplifier. The A-100 includes features that make it a good choice in a wide variety of situations; from driving a small music system in a home or business to providing audio for a second zone in a larger home theater installation, or whole house music system.

- **Best-in-class design and sound quality.** The A-100 shares the same superior design and high-quality parts as our bigger amplifiers, so it performs "like the big boys" and sounds far better than most amps in its price and power class.
- **50 watts per-channel @ 8 ohms (80 watts per-channel @ 4 ohms)** of stable, stellar audio quality - sufficient to drive most speakers to satisfying listening levels.
- **Flexible power switching.** The A-100 can be configured to switch on when a trigger is received and when it senses audio signal on its inputs. The A-100's Trigger Output can be used to pass trigger signals to other components.
- **Front panel volume control.** With its convenient analog front panel volume control, the A-100 can be used to adjust fixed-level audio sources.
- **Heavy duty power supply with massive toroidal transformer** provides plenty of continuous power to drive even low efficiency speakers, and enough dynamic power to effortlessly reproduce musical peaks without strain or distortion.
- **Compact size** makes it easy to find a location for the A-100.
- **New styling.** The A-100 now sports our new, more evolved Gen2 styling.
- **Loop output.** The A-100 offers a loop output to facilitate chaining additional amplifiers or other devices.
- **Full sized five-way binding posts** make it easy to attach thick wires, lugs, or banana plugs.
- **Illuminated Volume knob.** The A-100's volume knob is surrounded by an illuminated ring, which indicates both Power and Fault status, while the rotational position of the knob is highlighted by a pinpoint light on the knob itself.
- **User selectable AC line voltage**; 115 VAC or 230 VAC.

You can find more information about the Emotiva Mini-X A-100 on our website at www.emotiva.com

Unpacking

Your Mini-X A-100 was carefully packed and should reach you in perfect condition. If you notice any shipping damage or other issues when you unpack the unit, please contact us immediately.

Gently remove your A-100 from the packing carton and remove all wrappings and shipping material.

It is important to save the box and all packing materials in case your A-100 ever needs to be moved or shipped back to the factory for service.

Please keep your sales receipt in a safe place. It is the easiest way to verify your purchase date for warranty purposes and may also be required if you ever have to file an insurance claim.

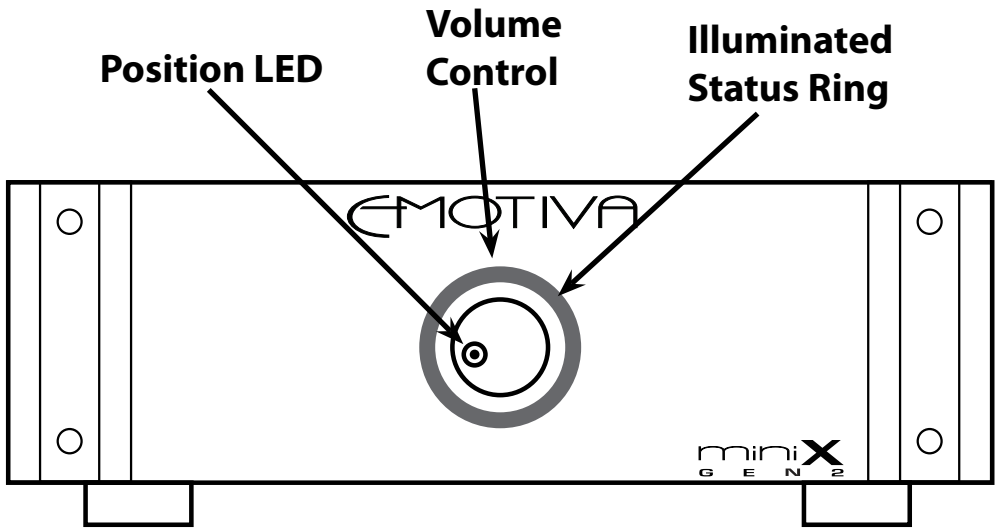
We truly value customer feedback and would like to hear from you.

Box Contents

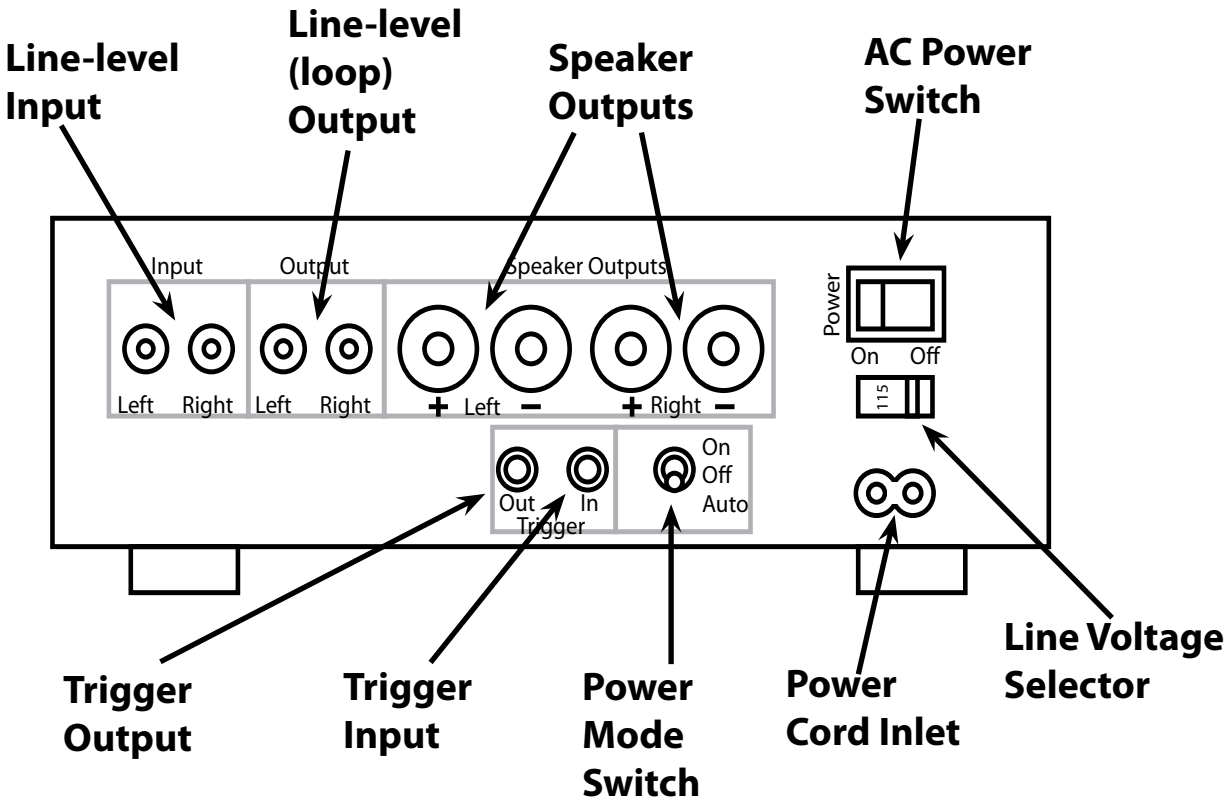
- Mini-X A-100
- Power Cord

The Emotiva Mini-X A-100

FRONT PANEL



REAR PANEL



Quick Start

In order to get the most from your Mini-X A-100 amplifier, we urge you to read the entire manual. If you just want to connect it to a source and a pair of speakers and don't need to know about all the triggering options and other features right away, this section will cover the basics you will need to get started.

- Find a secure location for your A-100.
- Verify that the Line Voltage switch (on the rear panel) is set for the correct voltage.
- Set the Power Mode switch to On (if you want the A-100 to stay on when you turn the AC Power switch On) or Auto (if you want the A-100 to turn On when there is a signal present and return to Standby when there is no signal).
- Connect the A-100 to a pair of 8 ohm or 4 ohm speakers using reasonably heavy gauge speaker wires (at least 18 gauge).
- Connect a line level input source.
- Find some music you *really* like to listen to.
- Turn on the AC Power switch and turn up the volume a bit!
- Enjoy!

Consider taking the time to read the rest of this manual while you are comfortably enjoying your A-100.

Connections

Connecting speakers to the Mini-X A-100

The A-100 has no special connection requirements; five-way binding posts are provided for connecting one stereo set of speakers.

- Always use high quality speaker wire of reasonable gauge (18 gauge or heavier)
- If you must use lighter wire, try to keep the length as short as possible
- Be careful to wire both speakers "in phase" (the plus/red terminal on each speaker to the plus/red terminal on your amp)
- Use wires of equal length and gauge for both speakers
- If you use stranded cables, use care to avoid short circuits (results from stray strands touching)
- Emotiva offers very high quality pre-made speaker cables at reasonable prices (you will find them in the Interconnects section on our website at www.emotiva.com)

Connecting an input source to the Mini-X A-100

The A-100 expects a line level analog input source via unbalanced (RCA) type connectors. Since the A-100 has a front panel Volume control, your source may be either fixed or variable level. (DO NOT connect a digital signal to the input of the A-100).

Connecting the analog (loop) Output of the Mini-X A-100 to another device

The Output of the A-100 provides another copy of the input signal for chaining to another device. The output signal is the same as the input.

Connecting the Trigger Input and Trigger Output of the Mini-X A-100

The Trigger Input accepts a 12 VDC (nominal) trigger signal from another device via a standard 1/8" mono plug. When the signal is active (and the A-100 is configured to do so), the A-100 will switch On.

The Trigger Output on the A-100 is a pass-through. The Trigger Output sends out a 12 VDC trigger signal when a trigger signal is present at the A-100's Trigger Input. (When a trigger signal is used to switch the A-100 On, you can use the A-100's Trigger Output to "chain" that trigger to activate other devices.)

Configuration and Operation

Line Voltage

Verify that the Line Voltage switch (protected slide switch on the rear panel) is set for the proper supply voltage for your area.

Status ring

The ring around the front panel Volume control illuminates to show status.

- OFF indicates that AC Power is switched off (or is missing).
- BLUE indicates that the A-100 is on and operating normally (the blue Position LED on the knob should also be illuminated).
- AMBER indicates that the A-100 is in Standby mode.
- FLASHING AMBER indicates that the A-100 is in Protect mode.

Power Mode switch

The Power Mode switch controls how the A-100 reacts to audio inputs, trigger control signals, and the AC Power switch.

The front panel Volume control sets only the level for the Speaker outputs (it does not affect the loop output).

When the rear panel AC Power switch is set to Off, the A-100 X will not respond to any input or signal.

When the Power Mode switch is set to On - the A-100 is controlled only by AC Power switch. When the AC Power switch is Off, the A-100 will not operate. When the AC Power switch is On, the A-100 will operate, and the Speaker Outputs will be active.

When the Power Mode switch is set to Off - the A-100 is controlled by the AC Power switch AND the Trigger Input. When the AC Power switch is Off, the A-100 will not operate. When the AC Power switch is On, the A-100 will remain in Standby mode until a Trigger input is received . When the Trigger Input is active, the A-100 will switch On and operate, the Speaker Outputs will be active, and the Trigger Output will be active.

When the Power Mode switch is set to Auto - the A-100 is controlled by the AC Power switch and the audio signal. When the AC Power switch is Off, the A-100 will not operate. When the AC Power switch is On, the A-100 will remain in Standby mode until audio signal is detected at the input. When the A-100 is in Standby mode and an audio is sensed at the input, the A-100 will switch On and operate, and the Speaker Outputs will be active.

Note: When a trigger signal is received at the Trigger Input of the A-100, it is ALWAYS passed to the Trigger Output - even if the A-100 is powered Off.

Application Suggestions Examples

Simple trigger control

The Mini-X A-100 is connected to a pair of speakers and receives its input from a stereo preamp. The preamp has a trigger output, which is connected to the Trigger Input on the A-100. The AC Power switch on the A-100 is set to On, and the Power Mode switch is set to Off.

The A-100 remains in Standby mode as long as the preamp is off. When the preamp is switched on, its trigger output becomes active, which switches the A-100 On. When the preamp is switched off, the A-100 returns to Standby mode.

Audio signal control

The Mini-X A-100 is connected to a pair of speakers and receives its input from a stereo preamp. The preamp does NOT have a trigger output. The AC Power switch on the A-100 is set to On, and the Power Mode switch is set to Auto.

The A-100 remains in Standby mode as long as the preamp is off. When the preamp is switched on and starts playing, the A-100 senses the audio signal and switches On. When the signal is no longer present, the A-100 waits for a brief period of time and then returns to Standby mode.

Care and Maintenance

Periodic Maintenance

Your Mini-X A-100 amplifier requires no periodic maintenance or calibration.

Cleaning the Emotiva Mini-X A-100

- If necessary, the A-100 should be cleaned gently with a soft rag.
- If something sticky gets on the front panel or case of the A-100, it should be cleaned with a mild cleaning solution applied to a soft rag, followed by wiping with a clean rag dampened with plain water and drying with a soft dry rag or cloth.

Note: DO NOT spray water or cleaning solution directly onto the A-100 or into the vents. This will damage the amplifier and void the warranty.

Specifications

Analog inputs:
Unbalanced (RCA); one stereo pair

Analog outputs (loop):
Unbalanced (RCA); one stereo pair

Input sensitivity (for full output):
600 mV (8 ohm load)

Speaker outputs:
5-way binding posts; one stereo set

Minimum recommended load impedance:
4 ohms (which equals one 4 ohm load or two paralleled 8 ohm loads per channel)

Power output:
50 watts / channel RMS; continuous into 8 ohms; 20 Hz - 20 kHz;
<0.05% THD; both 2 channels driven (FTC)

80 watts / channel RMS; continuous; into 4 ohms

S/N ratio:
> -95 dB (A-weighted)

Frequency response:
20 Hz to 20 kHz + / - 0.08 dB at 1 watt (- 1 dB at 80 kHz)

Front panel controls and indicators:
Volume; analog potentiometer with machined aluminum knob, illuminated Status ring, and pinpoint Position LED (Illuminated ring changes color to indicate status)

Back panel controls:
AC Power switch
Line Voltage (protected slide switch)
Power Mode switch (On, Off, Auto)

Trigger and control:
Trigger Input: 5-12 VDC
Auto-sense of audio input signal
Trigger Output: 12 VDC 120 mA max

Protection:
The Mini-X A-100 is protected against excessive operating temperature, shorted speaker connections, ground faults, and other common fault conditions. If a fault occurs, the Mini X will return to Standby mode and the illuminated ring (around the Volume control) will flash Amber to indicate a fault condition.

Power requirements:
115 VAC or 230 VAC +/- 10% @ 50 / 60 Hz (selectable by rear-panel switch)

Dimensions:
8.5” wide x 3.125” high x 15” deep (includes feet, binding posts, and Volume knob)

Weight:
11.8 lbs ; 15 lbs (packaged)

Troubleshooting

The Mini-X A-100 amplifier is carefully designed and manufactured from high quality precision components to ensure years of trouble free operation. We really doubt you'll ever have any problems with your A-100, but if you do, here are a few things you could try.

First verify that the Line Voltage selector on the rear panel is set to the correct voltage.

Problem: No sound is heard from either channel (nothing is lit)

You have no AC power

- Verify that the rear panel AC Power switch is On
- Verify that your circuit is live
- Verify that the line cord on the A-100 is fully inserted and is tight

Problem: No sound or distorted sound is heard from either channel (the Status ring is BLUE)

The A-100 is not indicating a Fault condition

- Verify that the Volume control isn't turned all the way down
- Check your source
- Check your speaker connections and speakers

Problem: No sound is heard from either channel (the Status ring is FLASHING AMBER)

The A-100 is in Protect mode, which indicates a Fault condition

- Switch the AC Power switch Off and On to clear the Fault condition
- If the fault remains, look for shorted speaker cables or damaged speakers
- Check your source (unplug the source and see if the fault goes away)

Problem: The Status ring is AMBER and the A-100 fails to come on when triggered

The A-100 is in Standby mode and should respond to a valid trigger signal

- Check your trigger connections
- Check the trigger settings on your source equipment

Problem: The Status ring is AMBER and the A-100 fails to come on when audio signal is present at the input

- Verify that the Power Mode switch is set to Auto
- Check your source and connections

Emotiva Audio Corporation Five-Year Limited Warranty

What does this warranty cover? Emotiva Audio Corporation ("Emotiva") warrants its products against defects in materials and workmanship.

How long does this coverage last? This warranty commences on the date of retail purchase by the original retail purchaser and runs for a period of five years thereafter. This warranty is transferable to any person that owns the warranted product during the Term. Emotiva warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in the previous 2 sentences is hereinafter referred to as the "Term". TO THE FULLEST EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES RELATED TO THE ORIGINAL PRODUCT AND ANY REPLACEMENT PRODUCT OR PARTS (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE EXPRESSLY LIMITED TO THE TERM OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. A claim under this warranty must be made by you within the Term. A claim shall not be valid (and Emotiva has no obligation related to the claim) if it is not made within the Term and if it is not made in strict compliance with the requirements of the "How do you get service?" section.

What will Emotiva do? Emotiva will, at its option, either: (i) repair the product, or (ii) replace the product with a new consumer product which is identical or reasonably equivalent to the product. Emotiva may provide you with a refund of the actual purchase price of the product in the event (i) Emotiva is unable to provide replacement and repair is not commercially practicable or cannot be timely made, or (ii) you agree to accept a refund in lieu of other remedies hereunder. When a product or part is repaired or replaced, any replacement item becomes your property and the replaced item becomes Emotiva's property. When a refund is given, the product for which the refund is provided must be returned to Emotiva and becomes Emotiva's property.

What is not covered by this warranty? This warranty does not apply: (i) to damage caused by use with non-Emotiva products, where the non-Emotiva product is the cause of the damage; (ii) to damage caused by service or maintenance performed by anyone who is not a representative of Emotiva; (iii) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (iv) to a product or part that has been modified after its retail purchase, where the modification caused or contributed to the damage; (v) to consumable parts, such as batteries; or (vi) if any Emotiva serial number has been removed or defaced and Emotiva cannot otherwise confirm that you are the original retail purchaser. EMOTIVA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR RELATED TO ANY DEFECTS IN OR DAMAGES TO ITS PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

How do you get service? In order to make a claim under the warranty, you must:

1. Call a customer service representative ("CSR") of Emotiva at 1-877-EMO-TECH (1-877-366-8324). Provide the CSR with a description of your problem and the serial number of the product for which the warranty claim is being made.
2. The CSR will provide you with a returned material authorization number ("RMA").
3. Ship the product to Emotiva at the following address, with the RMA written in large, bold numbers on the outside of the box, and with the letters "RMA" written before the number. Parcels arriving without an RMA number on the outside of the box will be refused.

Emotiva Audio Corporation
Attn: Repair Department
139 Southeast Parkway Court
Franklin, TN 37064

How does state law apply? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Accessories

Speaker cables

Using high quality speaker cables will ensure that you achieve the best sound quality and maximum reliability from your Mini-X A-100 amplifier and the speakers connected to it. Emotiva offers high quality speaker cables that feature solid engineering, boast premium build quality, excellent performance, and reasonable cost -you will find them on our website at www.emotiva.com .

Notes

All information contained in this manual is accurate to the best of our knowledge at the time of publication. In keeping with our policy of ongoing product improvement, we reserve the right to make changes to the design and features of our products without prior notice.

Emotiva Audio Corporation
135 Southeast Parkway Court
Franklin, TN 37064
emotiva.com